

Date: Mon, 29 Nov 93 15:59:40 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1402
To: Info-Hams

Info-Hams Digest Mon, 29 Nov 93 Volume 93 : Issue 1402

Today's Topics:

 * SpaceNews 29-Nov-93 *
 Aluminum towers
 Calculating SWR
 Common CW contact words and abbreviations?
 CONELRAD-what was it?
 expensive?
 How Long are Licenses taking?
 Logging program for casual contacts (2 msgs)
 New "pizza" policy? (2 msgs)
 Odd Static Observed

Repeater calling procedure (Was: Elmers are dead, god help us hams!) (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 29 Nov 93 16:49:46 GMT
From: news-mail-gateway@ucsd.edu
Subject: * SpaceNews 29-Nov-93 *
To: info-hams@ucsd.edu

SB NEWS @ AMSAT \$SPC1129
* SpaceNews 29-Nov-93 *

BID: \$SPC1129

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SpaceNews
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MONDAY NOVEMBER 29, 1993

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

* KITSAT-OSCAR-25 NEWS *

=====

KO-25 Operation Status Report 13 (24-Nov-93)

1. General

Kernal and other OBC186 S/Ws are all loaded and running well. Spacecraft is showing healthy condition. Battery is being discharged very small amount compared to KO-23. Still using TX0 as it is showing very good performance.

2. Experiments Carried Out

2.1 CCD Earth Imaging System

Two camaras onboard are showing good pictures of Earth. The Black and white high resolution (200 meter) camera is showing excellent pictures. The color camera with low resolution (2 kilometer) is also showing great images after some color mapping process. Other than the color imager's gain control difficulty, the camera system is working well and taking pictures everyday.

2.2 InfraRed Sensor Experiment (IREX)

IREX has been on since the beginning of the KO-25 operation. This experiment is to acquire I/V characteristics of IR sensors. Passive cooling structure was devised for this experiment and currently we are monitoring the temperature of this cooling system.

3. Experiments on the way

3.1 KASCOM (KAIST Satellite Computer)

The initial check out is on the way. A SaTReC developed multitasking kernel and long-term memory test task are to be commenced the initial test.

3.2 DSPE

38.4 kbps Downlink booster is being developed by utilizing DSPE. Protocol test is still being carried out on the ground.

3.3 LEED (Low Energy Electron Detector)

After sufficient time for outgassing period, in December this device will be turned on.

4. Other Information

The uplink to KO-25 will not be available currently. It will be open with KO-25 BBS service after the system check out completion. Some of the good pictures from KO-25 will be released through KO-23 for the time being.

For more info contact:

hskim@satrec.kaist.ac.kr
FAX) +82 42 861 0064
Tel) +82 42 869 8614
SaTReC, KAIST

[Info via Hyung Shin Kim]

* MICROSAT ANTENNA POLARIZATION *

=====

There has been a certain amount of confusion concerning the sense of the polarization of the Microsat downlinks. The following by Jim White, WD0E, is an attempt to clarify the situation.

The two transmitters in each Microsat are connected to a canted turnstile downlink antenna through a hybrid. The two input ports they are connected to are out of phase with each other. When one transmitter is on, the sense of the downlink will be RHCP, and when the other is on, it will be LHCP. When controllers switch transmitters, they also switch polarization sense. No sense is "normal". During construction there was no attempt to make a particular transmitter a particular sense. The limiting factor was how to fit the semi-rigid cables connecting all the various parts together in the tiny space inside the transmitter module. Additionally, since one of the objectives of the Microsat Project was to create satellites that could be used with very simple portable ground stations using simple omni-directional antennas, there was no need to be concerned about polarization sense.

When receiving with a circularly polarized ground station antennas, miss-matched sense can make several dB of difference at times. The most strongly circular signal (or the one with the lowest eccentricity) will be

received by the ground station when the bottom of the satellite is pointed directly at it. For stations at about 35 to 50 degrees north or south latitude, this occurs when the satellites are directly overhead and slightly lower in latitude. For all but L0-19, the turnstile is pointed down in the northern hemisphere. For L0-19, it's down in the southern hemisphere. At other times the sense is effected by a variety of other influences and cannot be relied on.

If you have a circularly polarized Yagi with switchable sense you can perform a test to see which transmitter provides which polarization. Throughout a pass, but particularly when the satellite is nearly overhead, switch sense every few seconds and see which is stronger. At times you will notice a large difference (A0-16 is 5 S units different on a TS811). The sense that consistently provides the strongest signal over the majority of the pass is the sense of the downlink for that transmitter. And for all but DOVE, it also correlates to beacon frequency, since the 70 cm transmitters are all on different frequencies.

DOVE is a special case since it's two transmitters are on nearly the same frequency. To make the correlations on DOVE you would need to do the same test as above, but also check which transmitter is in use as indicated by the STATUS line. We normally run TX#2 on DOVE because it is more efficient.

The following provides beacon frequency and polarization sense for all the Microsat satellites:

W0-18:

437.075 PSK LHCP (this TX is bad and not normally used)

437.100 RC RHCP (normally in use)

L0-19:

437.153 PSK LHCP

437.125 RC/CW RHCP

A0-16:

437.025 PSK LHCP (not presently in use)

437.050 RC RHCP (in use now)

D0-17:

145.825 TX#1 LHCP

145.825 TX#2 RHCP (normally used, and in use now)

[Info via Jim White, wd0e@amsat.org]

* CHINA ON SATELLITES *

=====

The Tsinghua University Amateur Radio Club of Beijing, China is happy to

report that the Chinese Radio Sports Association has provided them with some OSCAR satellite ground station equipment that they may use for approximately 6 months in an effort to become active on amateur satellites. The equipment consists of a Yaesu FT-726 dual-band transceiver, a crossed Yagi antenna, a 70cm amplifier, a receive preamplifier, and the elevation/azimuth rotor system. Walter OE2CAL, an Austrian amateur noted in Europe for his V/UHF activities, and Dieter DJ7BU are scheduled to join the radio club in their efforts to install the antenna system which has been delayed due to snowy weather. Both men are currently working in Beijing.

The students at the Tsinghua University Amateur Radio Club are new to OSCAR operations and are trying very hard to get a station on the air from China. The club is currently in need of satellite reference manuals, books, and satellite tracking software that can help them get on the air.

Information pertinent to satellite operation should be directed to Rick Niu, BY1QH, via any of the following paths:

Packet: BY1QH @ JA5TX.JPN.AS
Internet: Contact gateway_request@arasmith.com for more info
Airmail: Rick Niu
Public Relations Manager TUARC
Room 316 Building 25
Tsinghua University
Beijing 100084, China

* THANKS! *

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Thanks to all those who sent messages of appreciation regarding SpaceNews, especially:

BY1QH VE1AXJ ZS2LR K7EA OH8UV WD9IYT

* FEEDBACK/INPUT WELCOMED *

=====

Mail to SpaceNews should be directed to the editor (John, KD2BD) via any of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College

Lincroft, New Jersey 07738
U.S.A.

<<= SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--

John A. Magliacane, KD2BD * /\ * Voice : 1-908-224-2948
Advanced Technology Center |/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |/\| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * /\ * Morse : -. -.. ..--- -..

Date: Mon, 29 Nov 1993 16:16:10 GMT
From: swrinde!cs.utexas.edu!howland.reston.ans.net!europa.eng.gtefsd.com!
darwin.sura.net!fconvx.ncifcrf.gov!fcs260c!mack@network.ucsd.edu
Subject: Aluminum towers
To: info-hams@ucsd.edu

In article <9311291443.AA10891@wa2cjt.wellfleet> ginsburg@wellfleet.COM (Scott Ginsburg) writes:

>

>I'm interested in hearing about any good/bad experiences people have had with
>freestanding aluminum towers. I'm considering something like a Universal Mfg.
>50' tower. I'd probably mount a small tri-bander on it (14 to 18' boom).

>

> Thanks and 73,
> Scott, WA2CJT

>--

>Scott Ginsburg Voice: 508-436-3836
>Wellfleet Communications Internet: ginsburg@wellfleet.com
>2 Federal St. Amateur Radio: WA2CJT
>Billerica, MA 01821 Packet: wa2cjt@wa1phy.#ema.ma.usa.na
I had an A1 tiltover collapse on me. It was made by Heights Towers in
MI or WI (forget). The cause was stripping of the nut which carries
the lead screw. There was no engineering study available from the
manufacturer, so I did some calculations from comparable Acme screws etc
from Thompson. The tower loaded to less than the manufacturers specs
had 4000lb on the nut, my calculations showed that it would strip at
about 1,500lb. I've written to QST, a letter to the Ed, hoping to
notify hams of the problem.

Joe NA3T
mack@ncifcrf.gov

Date: Mon, 29 Nov 93 14:34:30 GMT
From: pacbell.com!sgiblab!munnar.oz.au!yarrina.connect.com.au!
werple.apana.org.au!lsupoz.apana.org.au!scs.apana.org.au!mu!
jmorris@network.ucsd.edu
Subject: Calculating SWR
To: info-hams@ucsd.edu

In article <1993Nov26.200816.19512@combdyn.com> lawrence@combdyn.com writes:

>
>How do you calculate SWR? I have a power meter...and I can measure the forward
>and reflected power. How to I take the two values to determine the SWR?
>
>Right now I have forward power of 5 Watts and reflected power of 0.1 Watts,
>what SWR would that correspond to?
>
>--
> --EMAIL-----PHONE-----FAX-----
> | WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
> | HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
> -----
> disclaimer = (working_for && !representing) + (Combustion Dynamics Ltd.);
>

I am not trying to be mean, but did you sit a radio theory test for your
amateur license ?

--
jmorris@mu.apana.org.au
James Morris VK2GVA

Date: 29 Nov 93 19:03:58 GMT
From: ogicse!hp-cv!hp-pcd!hpcvsnz!davidc@network.ucsd.edu
Subject: Common CW contact words and abbreviations?
To: info-hams@ucsd.edu

I am using Super Morse to learn CW at 13wpm rather than learn at 5wpm and then
try to get to 13wpm later on. Years ago I did learn at 5wpm but for me the
"if you don't use it you lose it" theory seems to be true. It's been suggested
that a very effective way to learn 13+wpm is to learn the sound of entire words
and abbreviations common in a CW contact. Then you only need to concentrate on
the pertinent things like call signs, the persons name etc. when copying. CQ and
<SK> are very obvious to me. What else is common though? I know all you CW
veterans can help me out here. Send me your top 10, 20, 30... type lists. If

someone has already compiled a list in this manner I would love to have a copy.

Thanks for the help.

Dave, KB7QCL

Date: Tue, 23 Nov 93 09:21:37 EST
From: nntp.ucsb.edu!library.ucla.edu!agate!linus!linus.mitre.org!mwvm.mitre.org!
M14494@network.ucsd.edu
Subject: CONELRAD-what was it?
To: info-hams@ucsd.edu

In article <CGvotM.8un@freenet.carleton.ca>
ab510@Freenet.carleton.ca (George W. Attallah) writes:

>
>
>I have an early 50s bc reciever with triangular symbols at 640 and 1240 khz.
>I have been told that these were for CONELRAD. Are there any old timers
>out there who can fill me in on this? TNX.
>
CONELRAD meant Control of Electromagnetic Radiation. The idea was that
when the Godless Communists came over the hill, all radio broadcasting
would cease, and special government stations on 640 and 1240 KHz (forgive
me, I mean KC!) would go on the air to tell folks what to do. Mostly this
was to consist of "hide in a hole in the ground until it's all over".

Mike White
m_white@mitre.org
m14494@mwvm.mitre.org

I speak only for myself, not my employer.

Date: 29 Nov 93 19:47:25 GMT
From: qualcomm.com!vixen.cso.uiuc.edu!moe.ksu.ksu.edu!cis.ksu.edu!
mac@network.ucsd.edu
Subject: expensive?
To: info-hams@ucsd.edu

aj467@Freenet.carleton.ca (Bill Macpherson) writes:
<I should have responded the first time Bill

<<I was SHOCKED to see that the mainstay computer in packet

<<was the commodore 64....

<I don't know why you're shocked to see the C=64 as a mainstay in Packet.
<There is no need for wizz-bang horsepower, just to print

I've used a VIC-20 for packet within the last year or two, and
I own an ATV adapter for the C=64 and/or (I forget) the VIC-20.
They were VERY GOOD little machines.

--Myron.

--

We preserve our freedoms using four boxes: soap, ballot, jury, and cartridge.
Myron A. Calhoun, PhD EE; Assoc. Professor (913) 539-4448 home
INTERNET: mac@cis.ksu.edu 532-6350 work, 532-7353 fax
UUCP: ...rutgers!depot!mac Packet radio: W0PBV@N0ARY.#NOCAL.CA.USA.NA

Date: 29 Nov 93 17:17:04 GMT
From: qualcomm.com!vixen.cso.uiuc.edu!uwm.edu!rpi!newsserver.pixel.kodak.com!
kodak!eastman!woody!bmitchel@network.ucsd.edu
Subject: How Long are Licenses taking?
To: info-hams@ucsd.edu

In article 29123@picker.com, BUSH@engvax.picker.com (JOHN BUSH) writes:
In <millerpe.754115576@spot.Colorado.EDU> millerpe@spot.Colorado.EDU writes:
ck my earlier reply:

license test taken in Sept took 6 wks and 5 days to arrive.

I took cw exam last week: attendees were reporting similar times for now.
Looks like U.S./FCC is catching up.

John (a new, 50 yr old novice!! -- KB8QHS
TNX/73

>

> Does anyone know how long liceses are taking to arive on average?

> I took my test at a VEC session a while back and I am hoping

> I don't loose interest before the license arrives.

>

> Who has a story on the quickest arrival of a license?

>

>

> Peter Miller

>

> --

> =====

> Peter M. Miller

Home: 303-494-6990

> Computing and Network Services - Small Systems
> University of Colorado - Boulder

Work: 303-492-4866
millerpe@spot.colorado.edu

I got my Extra upgrade in 5 weeks!!

Date: 29 Nov 93 19:23:27 GMT
From: att-out!cbnewsh!afy@rutgers.rutgers.edu
Subject: Logging program for casual contacts
To: info-hams@ucsd.edu

Date: Mon, 29 Nov 1993 14:01:17 GMT
From: netcomsv!netcom.com!greg@decwrl.dec.com
Subject: Logging program for casual contacts
To: info-hams@ucsd.edu

In article <VkHPDc7w165w@stat.com> david@stat.com (David Dodell) writes:
>I'm looking for a program for logging casual contacts (vs contest
>operation) ... any suggestions?

Yes, Microsoft Works. It has a little database in it (and you besides
get a nice spreadsheet, word-processor which is a subset of Word, and
a semi-useful terminal emulator) in which you can easily produce a
little application to record your information. What I like about Works
is it gives me the basic things I need without gulping a lot of space
on the laptop. Both DOS and Windows versions are available.

Greg

Date: Mon, 29 Nov 1993 12:58:36 GMT
From: netcomsv!netcom.com!mont@decwrl.dec.com
Subject: New "pizza" policy?
To: info-hams@ucsd.edu

The changed FCC part 97 rules can be obtained from the arrl info mail server.
First send a note to info@arrl.org with the following lines as the message
body:

index
help

The index command will send you a list of all the files available, and the help command will send you the necessary info to retrieve them.

have fun & 73,
km6wt, mont

--

Mont Pierce

```
+-----+
| Ham Call: KM6WT           Internet:  mont@netcom.com      |
|   bands: 80/40/20/15/10/2  IBM vnet:  mont@ibmmail.com    |
|   modes: cw,ssb,fm        |                               |
+-----+
```

Date: Mon, 29 Nov 1993 13:08:49 GMT
From: netcomsv!netcom.com!mont@decwrl.dec.com
Subject: New "pizza" policy?
To: info-hams@ucsd.edu

Oh yeah. Basically the rules changes from saying that "communications in which either party has a pituitary (spelling??, financial) interest is not allowed" to the new rules saying that "communications in which the Ham operator has a pituitary (or is it picunary...) interest is not allowed".

In other words, the old rule stated that neither party could have a financial interest in the communications, i.e. you could not call a business (except in emergency situations). The new rules state that you can call (autopatch) a business. The only limitation is that if you or your employer has a financial interest in the communication, then it is not allowed.

73,
km6wt

--

Mont Pierce

```
+-----+
| Ham Call: KM6WT           Internet:  mont@netcom.com      |
|   bands: 80/40/20/15/10/2  IBM vnet:  mont@ibmmail.com    |
|   modes: cw,ssb,fm        |                               |
+-----+
```

Date: Thu, 25 Nov 1993 06:23:57 GMT
From: nevada.edu!jimilenvoy!jim@uunet.uu.net
Subject: Odd Static Observed
To: info-hams@ucsd.edu

The following is a description of an observation that I made initially on 21 Nov. 93 between 1300 and 1330 Z and also several times since. I would like to see if others can (1) confirm this observation (eliminate the possibility that this is just a local noise source or receiver problem) and (2) explain what it is!

The following was observed at my QTH in Reno, NV, using a Kenwood TS450S. The antenna was a 33 foot wire up approximately 30 feet, end feed with 450 ohm ladder line to a transmatch.

Across the 14 "bands" listed below, I observed what sounds like static, about S3 or S4 in strength. The 100 khz or so in between these "bands" are noticeable less noisy. I didn't look much below 13 Mhz or above 15 Mhz. Neither of the noise blanker positions did much to reduce this noise. I used only cw and usb modes (should have tried am and fm too).

12.950 - 12.994 Mhz (44 khz)
13.098 - 13.142 Mhz (44 khz)
13.257 - 13.301 Mhz (44 khz)
13.403 - 13.450 Mhz (47 khz)
13.553 - 13.600 Mhz (47 khz)
13.700 - 13.748 Mhz (48 khz)
13.846 - 13.894 Mhz (48 khz)
14.000 - 14.047 Mhz (47 khz)
14.148 - 14.196 Mhz (48 khz)
14.298 - 14.345 Mhz (47 khz)
14.437 - 14.486 Mhz (49 khz)
14.585 - 14.633 Mhz (48 khz)
14.733 - 14.781 Mhz (48 khz)
14.880 - 14.930 Mhz (50 khz)

I have checked several times since my initial observation, and the "noise" is still there in the same pattern, though I haven't checked the frequencies closely.

Has anyone noticed this before? Are these some sort of spread spectrum transmission? Over the horizon radar? (Definitely not the same thing as the "woodpecker" that I used to hear). If so, what is the source? Who is using it? Has this been observed on other frequencies? Does anyone know of any information about this? Thanks.

Date: 29 Nov 1993 14:39:57 -0500
From: digex.net!access!bote@uunet.uu.net
Subject: Repeater calling procedure (Was: Elmers are dead, god help us hams!)
To: info-hams@ucsd.edu

blumb@sage.cc.purdue.edu (Bill Blum) writes:

>"N9VLS monitoring...."

>Two hams who were chatting about traffic seemed utterly oblivious to my

>call.... a third ham joined in.... then, I hear:

If you said "N9VLS monitoring" in between transmissions of their ongoing conversation, they probably thought that you thought the frequency was not in use. This is understandable. It is more effective to simply squirt your call in between transmissions and they will pick you up.

By the way, while we're on this topic, if you are waiting for someone to come up on frequency, saying that you are monitoring is a good way to let him know that. It helps to establish communications in that circumstance.

--

finger bote@access.digex.net
Exiting Kill Mailboxes

Date: 29 Nov 1993 14:34:31 -0500
From: digex.net!access!bote@uunet.uu.net
Subject: Repeater calling procedure (Was: Elmers are dead, god help us hams!)
To: info-hams@ucsd.edu

bbattles@arrl.org (Brian Battles WS10) writes:

>repeater owners and users around the US over a few years. The use of
>"WS10 monitoring" or "WS10 listening" is essentially the de facto
>standard way of announcing that you're on the machine and would enjoy
>a QSO. Calling CQ is in no way "expressly verboten," it's just generally
>considered substandard operating procedure on VHF repeaters (as is the
>use of Q signals and CW abbreviations, eg, XYL, HI, etc).

Calling "CQ" multiple times is completely unnecessary on an FM repeater. Perhaps this is what you had in mind when you mentioned that it is considered "substandard"

procedure; certainly, saying "Seek You" cannot be invalid for seeking out someone with whom to converse.

I'll cite a local ham's technique as an example of a perfectly effective and non-obnoxious way to stir up a conversation:

"CQ from W3AEZ"

There. That wasn't so bad. :) Short and right to the point.

As George Miller once admitted on a local (D.C. area) repeater, there are many customary operating procedures which persist only because they persist; they are really quite meaningless, which leads to these "what-for?" discussions.

Examples he mentioned included saying "BREAK" multiple times to mean what you really mean, namely "EMERGENCY"; saying "monitoring" when you really mean "CQ" or "anybody there" ("QRZ?" also falls into this category.)

I could understand it if it was merely local preference.

It's too bad that a newcomer's pamphlet distributed by a national ham radio organization perpetuates these mis-uses. English is taking enough of a beating as it is.

Please fix it.

--

finger bote@access.digex.net
Exiting Kill Mailboxes

Date: (null)

From: (null)

You can download a demo copy of the WB20PA LogMaster Plus/Plus at (908) 787-2982.

End of Info-Hams Digest V93 #1402
